

ACADEMY

*Newsletter*DEDICATED
TO SCIENTIFIC
RESEARCH AND
EDUCATION.
INSPIRING
RESPECT FOR
THE NATURAL
WORLD*Namibia*

A NATURAL HISTORY OF AFRICA'S NEWEST NATION

🦋 Namibia, formerly known as South West Africa, was once governed by German and South African regimes

and is Africa's newest nation – gaining independence in late 1990. The Nama people, relatives of the Koisan people known as Bushman and Hottentots, gave their name both to the coastal desert, the Namib, as well as the nation of Namibia. 🦋 The Namib Desert stretches from southern Angola to South Africa. A coastal desert hugging the southern African Atlantic coast, the Namib is a land of stark contrasts and unmatched beauty. 🦋

Dr. Gary Williams, curator in the Academy's department of invertebrate zoology and geology, was educated as a marine biologist and spent six years in southern Africa studying the isolated

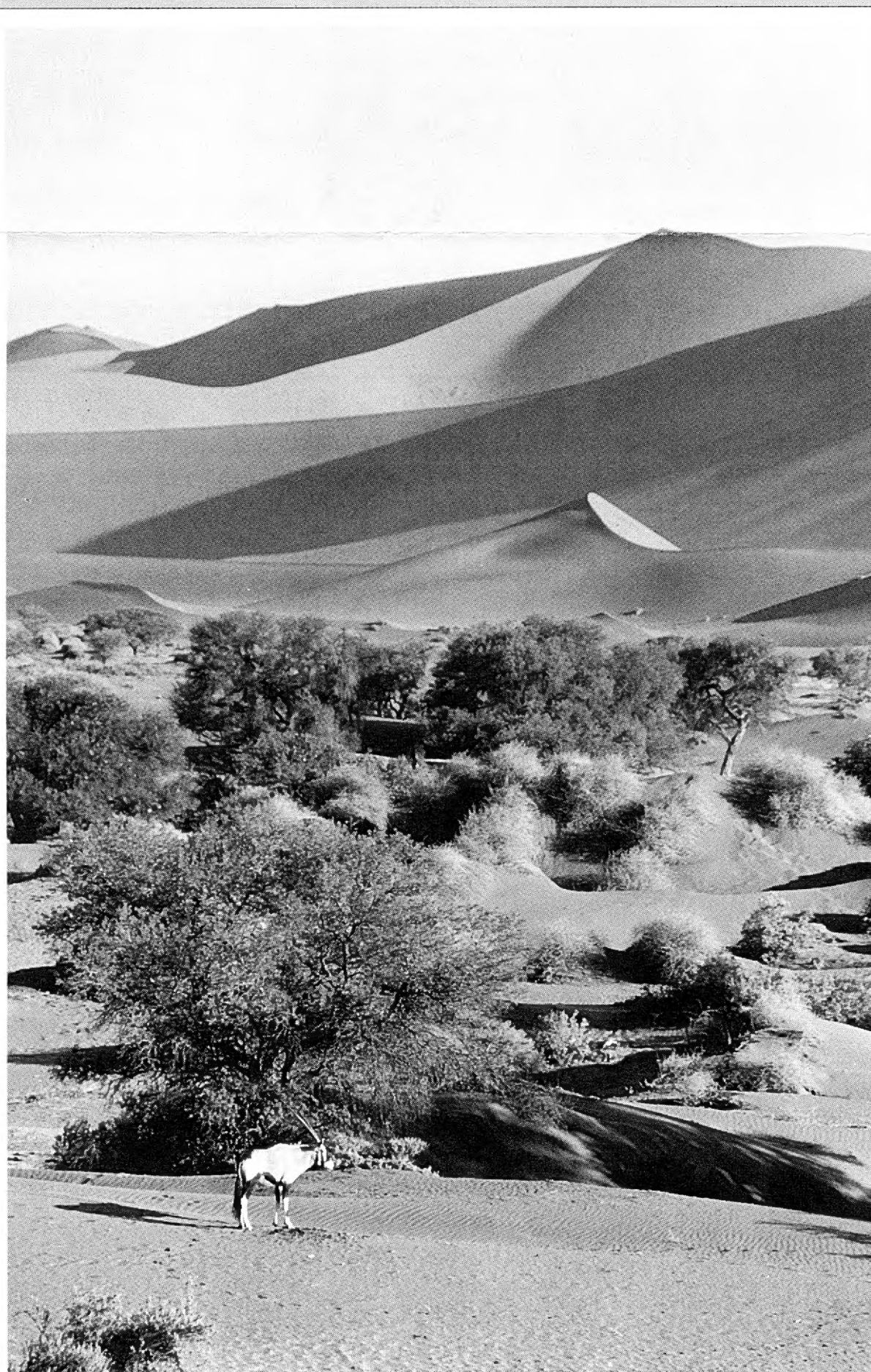
subcontinent. Williams will present a slide-illustrated lecture concerning the geological setting, Bushman rock

art, and unique flora and fauna of this fascinating region. 🦋 A land of fewer

than one million people in an area larger than France, Namibia is a region of aridity, clean air, dirt roads, and small towns – from the Skeleton Coast with desert canyons and huge sand dunes, to the savanna-covered interior plateau with spectacular wildlife in places such as Etosha National Park. 🦋

When attending this lecture please present your membership card at the Academy entrance and again at the Morrison Auditorium. This

members meeting is provided as a benefit of your membership and is only open to Academy members.



***Members Meeting – With Dr. Gary Williams,
Curator, Invertebrate Zoology and Geology***

JANUARY 12, 2 AND 7:30 PM

MORRISON PLANETARIUM

THE BIG BANG

AND THE JUDAIC-CHRISTIAN IDEA OF CREATION

In the beginning . . . the Universe began. Both scientists and theologians have long debated the origins of the universe. Could it have begun 20 billion years ago in a cataclysmic event known as the Big Bang? Join Dr. George V. Coyne, S.J., astronomer and director of the Vatican Observatory, in exploring this provocative question.

Jan. 25, 7:30 pm; Tickets \$2 each

This lecture is part of the Exploring the Universe Series. For advance tickets, use order form. Tickets available at the door on a standby basis. Call 750-7141, for more information.

ORION RENDEZVOUS:

A STAR TREK VOYAGE OF DISCOVERY

Imagine you're a cadet with the United Federation of Planets' Starfleet and are about to take a bold voyage into the final frontier. There you'll view galactic wonders, experience the scorching radiation of an exploding star and visit the birthplace of stars! This show features the voice of LeVar Burton as Geordi LaForge from "STAR TREK®: The Next Generation."

The show opens Jan. 14 and closes June 12th, and is shown daily at 2 pm with additional shows at 4 pm on weekends.

1994 ALMANAC

Preview the year to come with a look at 1994's heavenly highlights. In addition to this year's two solar eclipses, astronomers predict a potentially spectacular meteor show and the impact of a comet on the planet Jupiter. The show opens Jan. 14 and closes Mar. 2. Show times are at 1 and 3 pm on weekends.

CURRENT SKY SHOWS

The Planetarium will be closed Jan. 10-13 for a show change and will reopen on Jan. 14 with the two new shows mentioned above.

The sky shows through Jan. 9 (prior to this closure) include our special holiday show, "The Christmas Star," at 2 pm weekdays and 4 pm weekends. Additional shows on the weekend: "Galileo's Universe" at 1 and 3 pm; "Startalk" at 12 pm; and "Touch the Stars," our special family show, at 11 am.

When the Planetarium reopens on the 14th with the new shows (see above for times), other weekend shows for the rest of the month include "Touch the Stars" at 11 am and "Startalk" at 12 pm.

ADULT EDUCATION

Caribbean Carnival Costumes

It's almost time for Mardi Gras! Gloria Toolsie is an award-winning Carnival costume designer and has lots of new costumes to discuss with you. She'll share her knowledge of the history, materials and construction techniques behind the fabulous showpieces you see at Mardi Gras and San Francisco's own Carnival.

Jan. 8, 2-4 pm

\$12 members/\$15 nonmembers

The Amazon: The Environment, Biota and Humans

Join Dr. Carl Ferraris for a look at the unique combination of geologic and atmospheric conditions responsible for the creation of the vast tropical Amazon rainforest. You'll learn about the plant and animal life that evolved here and the extensive interplay among species that is so important to the health of the forest.

Jan. 13 to 27

(3 Thursdays), 7-9 pm

\$35 members/\$45 nonmembers

Preregistration required. For more information on these and other December offerings, call 750-7100.



The Academy and The Rietz Food Technology

Foundation present a

one-day food

symposium: Saturday,

March 5, 9 am to 7

pm. To order tickets,

use coupon on back

page. For more

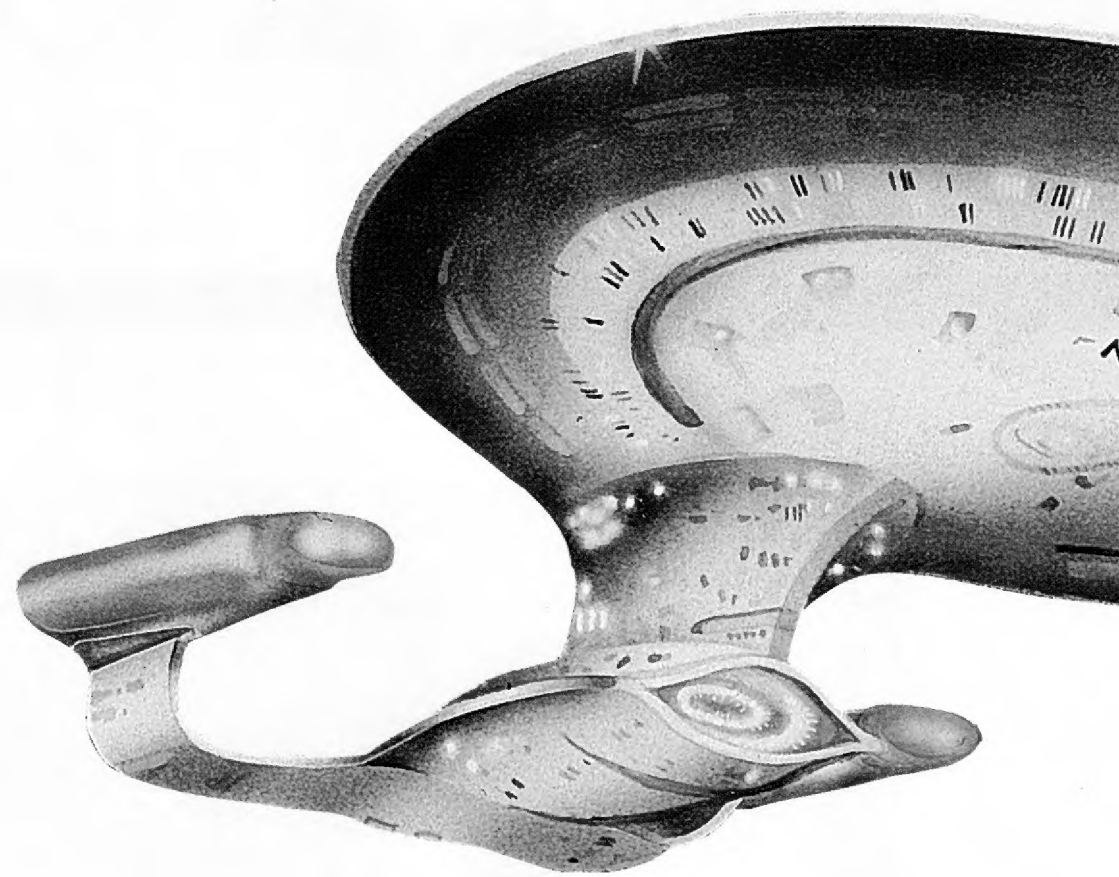
information,

call 750-7163



STAR TREK

FEDERATION



© 1993 Dawn Evans Scattre

Museum visitors will have an opportunity to "go before" when the Academy shows Federation Science. This \$1 million exhibit features displays and covers over 6,000 square feet in several theme areas which will portray the history of the *Enterprise*. A thematic representation of "The Bridge" will be the focus of the exhibit. Work stations, including communication and other science areas will be included. As visitors walk through "The Bridge," they will find themes relating to other areas of the *Enterprise*, such as "Engineering" and "Sickbay." A simulated "Transporter Room" will give visitors an opportunity to be "beamed down" to a different world. In addition to the asteroid field, program a voice-activated computer, turn on the starship.

Exhibits related directly to astronomy and planetology will be featured throughout the exhibit. Visitors will see original Star Trek tricorders, phasers, communicators, life-size alien models. Exhibit designers concentrated on the basic scientific principles of



practical astronomy and physiology. Visitors will see scientists in the future. In addition, the exhibit will feature systems, medical science and life sciences research such as the structure of DNA and planetology.

Admission into the exhibit is free for members after general admission to the Academy. The exhibit will be located at the Academy's admission office at 750-7159 for ticketing information.

Presented by **Bank of America**

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Generation are
created and con-

TO BOLDLY GO... EXPLORING FEDERATION SCIENCE

Beam Aboard: Special Viewing for Members

Members are invited to a special viewing of STAR TREK®: Federation Science, March 28 and 29, and April 18 and 19, between the hours of 6-9 pm. If you cannot attend one of these special viewings the best time to visit the exhibit would be in the afternoon on weekdays.

If you plan to view the exhibit during regular public hours, you'll need to pick up a STAR TREK BOARDING PASS at the membership booth in Cowell Hall as the exhibit will be time-ticketed. Your guest passes will allow

your friends to have to. Tickets for member

Star Trek

If you're new, help in our association anticipate years ahead (but the well). Call to sign up

YOUNG AUDIENCES

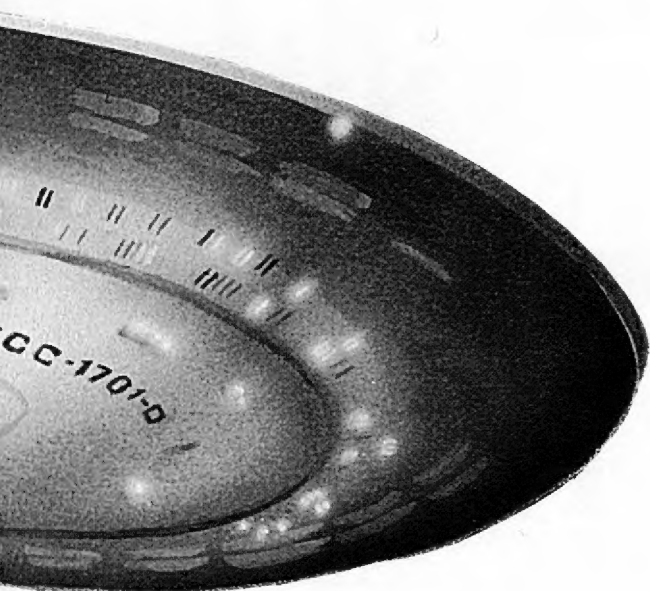


African Roots of Jazz

In a magnetic performance that traces the evolution of the drum from its earliest beginnings in Africa to its influence on contemporary Western music, E.W. Wainwright and Phavia Kujichagulia will enchant you with their dance, song and poetic/historical perspective. *Sunday, Jan. 30*

This family series occurs one Sunday per month until June, at 1 pm in the Morrison Auditorium and is free after admission to the Academy. For more information, call 863-1719.

Last call for applicants for the 1994 Highlight Docent Training Course.



OPENING
FEBRUARY 5
THROUGH MAY 1

ity "to boldly go where no one has
ycases the major exhibit, STAR TREK®:
exhibit includes over 40 modular
feet. The exhibit is divided into
ay science as related to the *Starship*
ll be the central
cations, naviga-
ors leave "The
s of the *U.S.S.*
nulation of the
see themselves
n, guests can navigate through an
n into a Klingon, and command a



will be located in a special science
Trek artifacts, including costumes,
and scenes from favorite episodes.
ncipals, including particle physics,
, that are expected to challenge
the principles behind propulsion
upport will be intertwined with
he galaxy, orbits, relativity, and
members and \$1 for nonmembers
be time-ticketed for all. Please call
g information.

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lated by the Oregon Museum of Science and Industry, Portland, Oregon.

ATION SCIENCE

nds into the Academy, but they will
pay admission to enter the exhibit.
or your guests will be available at the
ship booth for \$1.

k's Guiding Light

a fan of Star Trek, we can use your
assisting with programs and logistics
ed with the Star Trek exhibit. We
e a need for many volunteers, 16
d older, especially for weekdays
re will be weekend opportunities as
all Volunteer Services at 750-7154
p.

TRADITIONAL ARTS

Chinese Brush Painting

You Shan Tang, a graduate
in Fine Arts from Beijing
University, demonstrates the
various styles of Chinese
calligraphy and brush paint-
ing. — Jan. 8

California Indian Dolls

Sarah Gregory discusses the
natural materials used by
California Indians to make
tribal dolls, as well as their
cultural and historical sig-
nificance. She illustrates
with examples from her
family's collection of 1,500
ethnic dolls from around the
world. — Jan. 15

Persian Music

Orchestra Parvaneh per-
forms Persian classical and
folk music on a *santur* (a
72-stringed hammered dulci-
mer), *zarb* (wood drum)
and violin. — Jan. 29

Hawaiian Canoe Carver

Daily Jan. 19 to 23
10 am–5 pm, Cowell Hall
Hawaiian boat builder Peter
Balin will hand carve minia-
ture canoes and replicas of
traditional Polynesian
outrigger canoes.

Explore cultural traditions from
around the world, Saturdays at 1
pm. Free after general admission.

LECTURES

Signs of Life:

The Language and Meanings of DNA

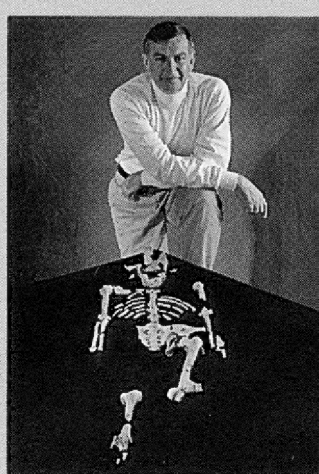
Join Robert Pollack for a discussion
about the complex meanings of the
living text called DNA

January 11, 7:30 pm

\$6 members/\$8 nonmembers

Ancestors: In Search of Human Origins

Dr. Donald Johanson, president of
the Institute of Human Origins and
discoverer of "Lucy," the oldest,
human ancestor, will discuss his
recent fossil hunts in Ethiopia and
will preview his new series of



Nanci Kahn

NOVA television
programs that air
beginning Feb.
28.

Following the
lecture and a
special NOVA
screening, there
will be a signing
of "Ancestors,"

the series companion book that
Johanson coauthored with Lenora
Johanson and Blake Edgar of the
Academy's "Pacific Discovery"
magazine.

February 24, 7:30 pm

\$6 members/\$8 nonmembers

Lectures are presented in the Morrison
Auditorium by experts in various aspects
of natural history. Please use coupon to
order tickets, or call 750-7128.

Kayaking the Full Moon:

A Journey Down the Yellowstone

Steve Chapple reflects upon his
experiences along the longest
undammed and unspoiled river in
the United States.

January 25, 7:30 pm

\$6 members/\$8 nonmembers

Science: The Final Frontier

THE CLAIRE MATZGER LILIENTHAL
DISTINGUISHED LECTURE SERIES

Space flight causes loss of bone
and calcium in humans exposed to
microgravity. The cause of this
space osteoporosis is just now
being found by dedicated medical
space shuttle missions.

In June of 1991, Dr. Millie
Hughes-Fulford flew on Colum-
bia for nine days, becoming the
first civilian woman scientist astro-
naut. She was also a crew member
on NASA's first medical mission,
SLS-1 investigating microgravity
induced changes in humans. She
will share her knowledge of space
physiology and the adventure of
space flight.

Find out about the future of
molecular medicine and the new
miracles of tomorrow.

March 9

6 pm Reception/Lecture:

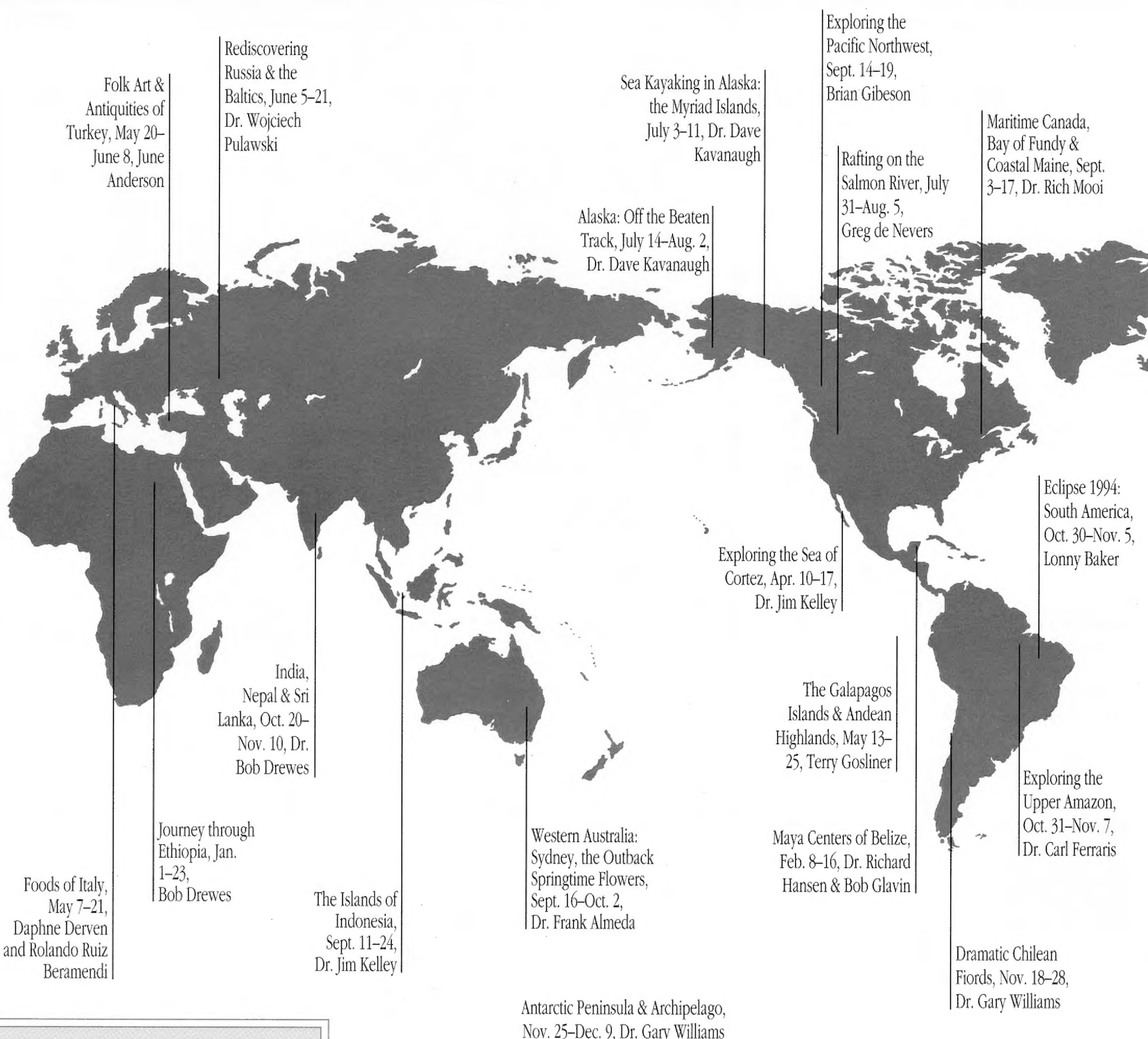
\$30 members/\$35 nonmembers

7:30 pm Lecture only: \$6 members/

\$8 nonmembers

1994 ACADEMY TRAVEL PROGRAM

DISCOVER A WORLD OF DIFFERENCE WITH ACADEMY TRAVEL. FOR ITINERARIES, CALL 750-7348.

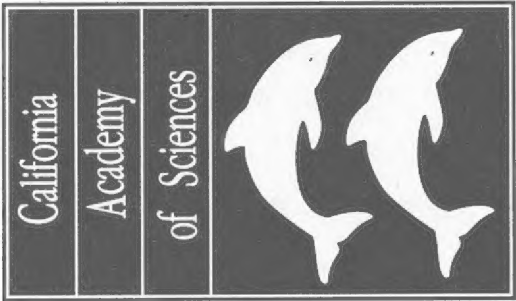


Coupon Form

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The Academy includes the Natural History Museum, Steinhart Aquarium and Morrison Planetarium. Open every day of the year from 10 am to 5 pm.

Visitor Services

Academy Information: 415-750-7145
Academy Store: 750-7330
Admissions: 750-7159
Aquarium: 750-7247
Biodiversity Resource Center: 750- 7361
Development Office: 750-7216
Education Office: 750-7100
Group Information: 750-7043
Job Hotline: 750-7333
Laserium: 750-7138
Lectures: 750-7128
Library: 750-7102
Lost and Found: 750-7150
Membership Office: 750-7111
Planetarium: 750-7141
Planned Giving: 750-7216
Security: 750-7000
Switchboard: 221-5100
Travel: 750-7348
Volunteer Services: 750-7154
Weekend Information: 750-7375

The Academy Newsletter is published monthly for Academy members.

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640

Ferengis
and Klingons
and Borgs,
Oh My!

Illustrated with photographs and drawings relating to Star Trek fiction and science fact, the “Exhibition Guide,” a 60-page booklet with a 3-D viewer, will help you explore our new exhibit’s



science wonders. Price \$9.95. The “Teacher’s Guide” that will enhance school field trips to STAR TREK®: Federation Science. It includes classroom pre-exhibit and post-exhibit activities. Price \$12.95.

January

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

February Dates to Remember:

STAR TREK®: Federation Science exhibit opens, Feb. 5
Conversations at the Herbst Theatre, Sue Hubbell, Feb. 7
Lectures, “Ancestors: In Search of Human Origins,” Feb. 24

Current Exhibits:

Hands On Science, through Sept. 5
Birds of a Feather, through Sept. 5
Jurassic!, through Feb. 6

Earth Celebrations

This month’s childrens program: Wetlands, Saturdays 12:30 and 3 pm

1



8

Chinese Brush Painting, 1 pm (Traditional Arts)

2

3

Planetarium Sky Shows on weekdays at 2 pm

4

11

Signs of Life: The Language and Meanings of DNA, 7:30 pm (Lectures)

5

Free Day First Wednesday of each month



12

Namibia – A Natural History of Africa’s Newest Nation, 2 and 7:30 pm (Members Meeting)

6

Specialty Tours

Free one-hour tour: Tuesdays – Aquarium; Wednesdays – Life Through Time; Thursdays – Wild California; all at 1:30 pm

13

7

14

Planetarium reopens with “Orion Rendezvous” and “1994 Almanac” (Planetarium)

15

California Indian Dolls, 1 pm (Traditional Arts)

9

The Sky Shows, “Galileo’s Universe” and “The Christmas Star” close (Planetarium)

16

Laserium Shows Thursday–Sunday, evenings, call 750-7138 (no membership discount)

10

Planetarium closed for show change through the 13

17

Planetarium Sky Shows on weekends at 11 am, and at 12, 1, 2, 3 and 4 pm

18

25

Kayaking the Full Moon, 7:30 pm (Lectures)

The Big Bang and the Judaic-Christian Idea of Creation, 7:30 pm (Exploring the Universe Series)

Paul Theroux, 8 pm (Conversations at the Herbst Theatre), call 392-4400 for tickets

19

Hawaiian Canoe Carver, through the 23rd, 10 am to 5 pm, (Traditional Arts)

26

Dolphin Feedings are at 10:30 am, and 12:30, 2:30 and 4:30 pm every day

20



Fish Roundabout Feedings are at 2 pm every day

27

21

Docent Training Orientation, 1:30 pm (Volunteer Services)

28

Upcoming Members Meetings:

Feb. 9, “Gardening in the Fog Belt,” with Pam Peirce
Mar. 9, “I Never Promised You a Rain Forest,” with Douglas Cheeseman, Jr.
Apr. 13, “A Society of Wolves,” with Rick McIntyre
May 11, “40 Years of Everest,” with Norbu Tenzing Norgay

22

Penguin Feedings are at 11:30 am and 4 pm every day

29

Persian Music, 1 pm (Traditional Arts)

23



30

African Roots of Jazz, 1 pm (Young Audiences)

31

Docent Training Orientation, 7 pm (Volunteer Services)
Ancestors: In Search of Human Origins, 7:30 pm (Lectures)

LECTURES	Qty/Mem.	Qty/Nonmem.	Total
Signs of Life: The Language and Meanings of DNA / Jan. 11	x \$ 6	x \$ 8	=
Kayaking the Full Moon - A Journey Down the Yellowstone River / Jan. 25	x \$ 6	x \$ 8	=
Ancestors: In Search of Human Origins / Feb. 24	x \$ 6	x \$ 8	=
Science: The Final Frontier/ Mar. 9 Lecture only	x \$ 6	x \$ 8	=
Lecture and Reception	x \$ 30	x \$ 35	=
		TOTAL \$	
MORRISON PLANETARIUM	Quantity	Total	
The Big Bang and the Judaic-Christian Idea of Creation / Jan. 25	x \$ 2	=	
		TOTAL \$	
FOODS FOR THE FUTURE	Qty/Mem.	Qty/Nonmem.	Total
Foods for the Future	x \$ 45	x \$ 60	=
A Look at Tomorrow's Table / Mar. 5 box lunch, regular	x \$ 10	x \$ 10	=
box lunch, vegetarian	x \$ 10	x \$ 10	=
		TOTAL \$	
DONATIONS			
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Credit card charges gladly accepted over \$10.			
Card#		Exp. Date	
Signature			

MAKE CHECK PAYABLE TO: C.A.S and mail with this coupon form to:
Membership Office, Ticket Services
California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118
Daytime Phone

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